R. Hutson 10/04

 # 9

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   3 <110> APPLICANT: Ankenbauer, Waltraud
   4         Schmitz-Agheguian, Gudrun
   5         Elizaveta, Bonch-Osmolovskaya
   6         Svetlichny, Vitaly
   7         Ebenbichler, Christine
   8         Angerer, Bernhard
   9         Laue, Frank
  11 <120> TITLE OF INVENTION: Thermostable Nucleic Acid Polymerase From Thermococcus gorgonarius
  13 <130> FILE REFERENCE: 4453
  15 <140> CURRENT APPLICATION NUMBER: US 09/269,860
C--> 16 <141> CURRENT FILING DATE: 2000-03-10
  18 <150> PRIOR APPLICATION NUMBER: PCT/EP97/05393
  19 <151> PRIOR FILING DATE: 1997-10-01
  21 <150> PRIOR APPLICATION NUMBER: EP/97100584.8
  22 <151> PRIOR FILING DATE: 1997-01-16
  24 <150> PRIOR APPLICATION NUMBER: EP/96115874.8
  25 <151> PRIOR FILING DATE: 1996-10-03
  27 <160> NUMBER OF SEQ ID NOS: 9
  29 <170> SOFTWARE: PatentIn version 3.0
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119             20                  25                  30
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122 Asn Phe Glu Pro Tyr Ile Tyr Ala Leu Leu Lys Asp Asp Ser Pro Ile
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131 65                  70                  75                  80
133 gag gtc tgg aag ctc tac ttc act cac ccc cag gac gtt ccc gca atc   288
134 Glu Val Trp Lys Leu Tyr Phe Thr His Pro Gln Asp Val Pro Ala Ile
135                 85                  90                  95
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RAW SEQUENCE LISTING   DATE: 02/14/2001
PATENT APPLICATION: US/09/269,860   TIME: 16:03:08

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146 Met Glu Gly Asp Glu Glu Leu Lys Met Leu Ala Phe Asp Ile Glu Thr
147         130                 135                 140
149 ctc tat cac gag ggc gag gag ttc gcc gaa ggg cct atc ctg atg ata    480
150 Leu Tyr His Glu Gly Glu Glu Phe Ala Glu Gly Pro Ile Leu Met Ile
151 145                 150                 155                 160
153 agc tac gcc gac gag gaa ggg gcg cgc gtt att acc tgg aag aat atc    528
154 Ser Tyr Ala Asp Glu Glu Gly Ala Arg Val Ile Thr Trp Lys Asn Ile
155                 165                 170                 175
157 gac ctt ccc tat gtc gac gtc gtt tcc acc gag aag gag atg ata aag    576
158 Asp Leu Pro Tyr Val Asp Val Val Ser Thr Glu Lys Glu Met Ile Lys
159         180                 185                 190
161 cgc ttc ctc aag gtc gtc aag gaa aag gat ccc gac gtc ctc ata atc    624
162 Arg Phe Leu Lys Val Val Lys Glu Lys Asp Pro Asp Val Leu Ile Ile
163         195                 200                 205
165 tac aac ggc gac aac ttc gac ttc gcc tac ctc aag aag cgc tcc gag    672
166 Tyr Asn Gly Asp Asn Phe Asp Phe Ala Tyr Leu Lys Lys Arg Ser Glu
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169 aag ctc gga gtc aag ttc atc ctc gga agg gaa ggg agc gaa ccg aaa    720
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171 225                 230                 235                 240
173 atc cag cgc atg ggc gat cgc ttt gcg gtg gag gtc aag gga agg att    768
174 Ile Gln Arg Met Gly Asp Arg Phe Ala Val Glu Val Lys Gly Arg Ile
175                 245                 250                 255
177 cac ttc gac ctc tac ccc gtc att agg aga acg att aac ctc ccc act    816
178 His Phe Asp Leu Tyr Pro Val Ile Arg Arg Thr Ile Asn Leu Pro Thr
179         260                 265                 270
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182 Tyr Thr Leu Glu Ala Val Tyr Glu Ala Ile Phe Gly Gln Pro Lys Glu
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186 Lys Val Tyr Ala Glu Glu Ile Ala Gln Ala Trp Glu Thr Gly Glu Gly
187         290                 295                 300
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191 305                 310                 315                 320
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195                 325                 330                 335
197 gta ggc cag agc ctc tgg gat gta tct cgc tcg agt acc gga aac ctc   1056
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199                 340                 345                 350
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214 Val Tyr Leu Asp Phe Arg Ser Leu Tyr Pro Ser Ile Ile Ile Thr His
215             405                 410                 415
217 aac gtc tcc cct gat aca ctc aac agg gag ggt tgt gag gag tac gac   1296
218 Asn Val Ser Pro Asp Thr Leu Asn Arg Glu Gly Cys Glu Glu Tyr Asp
219             420                 425                 430
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223         435                 440                 445
225 atc cca agc ctc ctc gga gac ctc ttg gag gag aga cag aag gta aag   1392
226 Ile Pro Ser Leu Leu Gly Asp Leu Leu Glu Glu Arg Gln Lys Val Lys
227     450                 455                 460
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235                 485                 490                 495
237 tac ggc tat aca aag gcc cgc tgg tac tac aag gag tgc gcc gag agc   1536
238 Tyr Gly Tyr Thr Lys Ala Arg Trp Tyr Tyr Lys Glu Cys Ala Glu Ser
239             500                 505                 510
241 gtt acc ggt tgg ggc agg gag tac atc gag acc acg ata agg gaa ata   1584
242 Val Thr Gly Trp Gly Arg Glu Tyr Ile Glu Thr Thr Ile Arg Glu Ile
243         515                 520                 525
245 gag gag aaa ttt ggc ttt aaa gtc ctc tac gcg gac aca gat gga ttt   1632
246 Glu Glu Lys Phe Gly Phe Lys Val Leu Tyr Ala Asp Thr Asp Gly Phe
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249 ttc gca aca ata cct gga gcg gac gcc gaa acc gtc aaa aag aag gca   1680
250 Phe Ala Thr Ile Pro Gly Ala Asp Ala Glu Thr Val Lys Lys Lys Ala
251 545                 550                 555                 560
253 aag gag ttc ctg gac tac atc aac gcc aaa ctg ccc ggc ctg ctc gaa   1728
254 Lys Glu Phe Leu Asp Tyr Ile Asn Ala Lys Leu Pro Gly Leu Leu Glu
255                 565                 570                 575
257 ctc gaa tac gag ggc ttc tac aag cgc ggc ttc ttc gtg acg aag aag   1776
258 Leu Glu Tyr Glu Gly Phe Tyr Lys Arg Gly Phe Phe Val Thr Lys Lys
259             580                 585                 590
261 aag tac gcg gtt ata gac gag gag gac aag ata acg acg cgc ggg ctt   1824
262 Lys Tyr Ala Val Ile Asp Glu Glu Asp Lys Ile Thr Thr Arg Gly Leu
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265 gaa ata gtt agg cgt gac tgg agc gag ata gcg aag gag acg cag gcg   1872
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267     610                 615                 620
269 agg gtt ctt gag gcg ata cta aag cac ggt gac gtt gaa gaa gcg gta   1920
270 Arg Val Leu Glu Ala Ile Leu Lys His Gly Asp Val Glu Glu Ala Val
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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/269,860

DATE: 02/14/2001
TIME: 16:03:08

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279                 660                       665                       670
281 tac aag gcc acc ggg ccg cat gtg gct gtt gca aaa cgc ctc gcc gca        2064
282 Tyr Lys Ala Thr Gly Pro His Val Ala Val Ala Lys Arg Leu Ala Ala
283         675                       680                       685
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287     690                       695                       700
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290 Lys Gly Ser Gly Arg Ile Gly Asp Arg Ala Ile Pro Phe Asp Glu Phe
291 705                       710                       715                       720
293 gac ccg gca aag cac aag tac gat gca gaa tac tac atc gag aac cag        2208
294 Asp Pro Ala Lys His Lys Tyr Asp Ala Glu Tyr Tyr Ile Glu Asn Gln
295                 725                       730                       735
297 gtt ctt cca gct gtg gag agg att ctg agg gcc ttt ggt tac cgt aaa        2256
298 Val Leu Pro Ala Val Glu Arg Ile Leu Arg Ala Phe Gly Tyr Arg Lys
299                 740                       745                       750
301 gaa gat tta agg tat cag aaa acg cgg cag gtt ggc ttg ggg gcg tgg        2304
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330     50                      55                      60
333 Val Val Arg Ala Glu Lys Val Lys Lys Lys Phe Leu Gly Arg Pro Ile
334 65                      70                      75                      80
337 Glu Val Trp Lys Leu Tyr Phe Thr His Pro Gln Asp Val Pro Ala Ile
338             85                      90                      95
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PATENT APPLICATION: US/09/269,860   TIME: 16:03:09

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